

- Scientific Notation
Revised @2009 MLC Page 1 of 6

6. Write the following in scientific notation.
- A. Volume of a raindrop = .001297
 - B. Repelling force = .00000076921
 - C. Population of city = 2987654
 - D. Capacitor rating = .01000000
7. Write the following numbers in scientific notation. Round to hundredths.
- A. 55500
 - B. .01313
 - C. 5780000
 - D. .000635
 - E. .00156
 - F. 21111
8. Use scientific notation to perform the indicated operations
- A. $.0178 \times .1110$
 - B. $83.7/5.82$
 - C. $2340.01 + 1.345 + .0045 + 21.01$
 - D. $254.01 - 1.2352$
9. Write in scientific notation
- A. .36
 - B. 300
 - C. .000063
 - D. 5798000
 - E. .0004545
 - F. 435000
10. Use scientific notation to perform the indicated operations. Round to hundredths.
- A. $(36000000 \times .000011) \div .0000033$
 - B. $54 \times .00005 \times 12000000$
 - C. $(3.2 \times 10^9 \times 2.84 \times 10^{-8}) \div (1.28 \times 10^{-9})$
 - D. $\sqrt{625 \times 10^{12}}$
11. Round off the following numbers to thousandths:
- A. 3415000000
 - B. .0000000513
 - C. 63.333
 - D. 5769000
 - E. 725777
 - F. .04002

12. Write the following in scientific notation.

- A. Revolutions of a turntable = 2750062
- B. Instantaneous current value = .00002971
- C. Inductance value = .000000000800
- D. Resistance value = 8000000

13. Write the following numbers in scientific notation.

- | | | |
|-----------|-----------|----------|
| A. .00871 | C. .00192 | E. .0805 |
| B. 12430 | D. 26220 | F. 12300 |

14. Use scientific notation to perform the indicated operations

- A. $123.01 + 2.222 + .00123 + 10.100$
- B. $765200 - 210.76$
- C. $.00054 \times .0400$
- D. $322000 \div .83$

15. Write in scientific notation

- | | | |
|-----------|-------------|-----------|
| A. .00394 | C. .0008775 | E. .04 |
| B. 683750 | D. 149200 | F. 999999 |

16. Use scientific notation to perform indicated operations.
Round to thousandths if necessary.

- A. $203 \times .000919$
- B. $(.762 \times 10^4) \div (320 \times 10^3)$
- C. $(.12 \times 10^5 \times 2 \times 8.4 \times 10^{-2}) \div (1.2 \times 10^5 \times 10^{-2})$
- D. $(.00362 \times 10^4 \times 2 \times 10^{-3}) \div (.362 \times 10^5)$
- E. $(7.03 \times 10^2 \times 3 \times 10^{-2}) \div .001$
- F. $\sqrt{.0049 \times 10^{10}}$

Scientific Notation (Review)

Answer Key

1. Write the following in scientific notation:

- A. Mass of proton = 1.67×10^{-24}
- B. Speed of light = 2.9979×10^{10}
- C. Population of the city = 4.9×10^7
- D. Resistance force = 4.82×10^{-6}

2. Write the following numbers in scientific notation. Round to hundredths if necessary.

- | | |
|---------------------------|---------------------------|
| A. 3.42×10^9 | D. 2.53×10^8 |
| B. 1.25×10^{-11} | E. 1.25×10^{-9} |
| C. 3.46×10^7 | F. 9.33×10^{-10} |

3. Perform the indicated operations

- A. 3240.1905 or 3.2401905×10^3
- B. 2087.62 or 2.08762×10^3
- C. 0.003768 or 3.768×10^{-3}
- D. 900000000 or 9.0×10^8

4. Write in scientific notation

- | | |
|--------------------------|--------------------------|
| A. 1.1052×10^7 | D. 1.37×10^3 |
| B. 6.43×10^5 | E. 5.53×10^4 |
| C. 9.63×10^{-2} | F. 9.40×10^{-4} |

5. Perform indicated operations.

- A. 0.000005 or $5. \times 10^{-6}$
- B. 0.0284605 or 2.84605×10^{-2}
- C. 2,806.147079 or 2.80614770×10^3
- D. 21,364,325,390 or $2.13643253 \times 10^{10}$
- E. .0000000000000000084 or 8.4×10^{-17}
- F. 802,195,122,000 or 3.46×10^{11}

6. Write the following in scientific notation.

A. Volume of a raindrop = 1.297×10^{-3}

B. Repelling force = 7.6921×10^{-7}

C. Population of city = 2.987654×10^6

D. Capacitor rating = 1.0×10^{-2}

7. Write the following numbers in scientific notation. Round to hundredths.

A. 5.55×10^4

D. 6.35×10^{-4}

B. 1.31×10^{-2}

E. 1.56×10^{-3}

C. 5.78×10^6

F. 2.11×10^4

8. Perform the indicated operations

A. 0.0019758 or 1.9758×10^{-3}

B. 14.3814433 or 1.43814433×10^1

C. 2362.3695 or 2.36236956×10^3

D. 252.7748 or 2.527748×10^2

9. Write in scientific notation

A. 3.6×10^1

D. 5.798×10^6

B. 3.0×10^2

E. 4.545×10^{-4}

C. 6.3×10^{-5}

F. 4.35×10^5

10. Perform indicated operations. Round to hundredths.

A. 120,000,000 or 1.2×10^8

B. 3240 or 3.24×10^3

C. 7,100,000,000 or 7.1×10^9

D. 25,000,000 or 2.5×10^7

11. Round off the following numbers to thousandths:

A. 3.415×10^9

D. 5.769×10^6

B. 5.13×10^{-8}

E. 7.258×10^5

C. 6.333×10^1

F. 4.002×10^{-2}

12. Write the following in scientific notation.

- A. Revolutions of a turntable = 2.750062×10^6
- B. Instantaneous current value = 2.971×10^{-5}
- C. Inductance value = 8.0×10^{-10}
- D. Resistance value = 8.0×10^6

13. Write the following numbers in scientific notation.

- | | | |
|---------------------------|--------------------------|--------------------------|
| A. 8.971×10^{-3} | C. 1.92×10^{-3} | E. 8.05×10^{-2} |
| B. 1.243×10^4 | D. 2.662×10^4 | F. 1.23×10^4 |

14. Perform the indicated operations

- A. 135.33323 or 1.353×10^2
- B. 765410.76 or 7.6541076×10^5
- C. 0.0000216 or 2.16×10^{-5}
- D. 387951.8072 or 3.87951807×10^5

15. Write in scientific notation

- | | | |
|--------------------------|---------------------------|--------------------------|
| A. 3.94×10^{-3} | C. 8.775×10^{-4} | E. 4.0×10^{-2} |
| B. 6.8375×10^5 | D. 1.492×10^5 | F. 9.99999×10^5 |

16. Perform indicated operations. Round to thousandths if necessary.

- A. 0.186557 or 1.866×10^{-1}
- B. 0.0238125 or 2.381×10^{-2}
- C. 1.68 or 1.68×10^0
- D. 0.00002 or $2. \times 10^{-5}$
- E. 2,109,000 or 2.109×10^6
- F. 22135.94362 or 2.214×10^4